TOHOKU UNIVERSITY

For more than a century, Tohoku University has been consistently ranked amongst the top academic institutions in Japan. Its research achievements and contributions, coupled with its wide network of collaborative partners, led to it being one of the first institutions to be conferred the status of a Designated National University by the Japanese government in June 2017

Motoko Kotani

Executive Vice President for Research

■Education

- Dr. Sci., 1990, Tokyo Metropolitan University
- M.S., 1985, Tokyo Metropolitan University
- B.S., 1983, University of Tokyo, Japan

■Career summary

- Principal Investigator, WPI-AIMR, Tohoku University, 2019-Present
- Director, Principal Investigator, WPI-AIMR, Tohoku University, 2012 -2019
- Distinguished Professor, Mathematics Institute, Graduate School of Science, Tohoku University, 2008 -2014
- Professor, Mathematics Institute, Graduate School of Science, Tohoku University, 2004-Present
- Associate Professor, Mathematics Institute, Graduate School of Science, Tohoku University, 1999-2003

■Awards / Fellowships

- President Education Award of Tohoku University (2010)
- President Special Prize of Tohoku University (2006)
- The 25th Saruhashi Prize (2005)

■Research

Geometry, Discrete Geometric Anlysis

Mathematics for materials

■Professional Affiliations

- International Science Council Governing Board Officer(President-elect)
- Science and Technology Co-Advisor to the Minister for Foreign Affairs
- Executive Member, Council for Science, Technology and Innovation, the Cabinet Office
- Member, Science Council of Japan
- Member, Board of Governors, Okinawa Institute of Science and Technology
- Board Member of The Mathematical Society of Japan

■Languages

Japanese and English

■Publications

- A Discrete Surface Theory, M. Kotani, H. Naito, T. Omori, Computer Aided Geometric Design 58 (2017) 24-54
- Materials inspired by mathematics, M.Kotani and S.Ikeda, Science and Technology of Advanced Materials (STAM), 17(1),(2016),253-259
- A new direction in mathematics for materials science, M.Kotani and S. Ikeda, Springer Briefs in the Mathematics of Materials, vol.1, Springer, 2015
- Geometric frustration of icosahedron in metallic glasses, A. Hirata, L. J. Kang, T. Fujita, B. Klumov, K. Matsue, M. Kotani, A. R. Yavari, M. W. Chen, Science 341(6144),376-379
- Standard realization of crystal lattice via harmonic maps, M. Kotani and T. Sunada, Trans. Amer. Math. Soc. 353(2000), 1-20